# INDIANA DEPARTMENT OF TRANSPORTATION MATERIALS AND TESTS DIVISION

## PERFORMANCE GRADED BINDER APPROVED SUPPLIER CERTIFICATION PROGRAM ITM No. 581-01P

#### 1.0 SCOPE.

- 1.1 This procedure covers the requirements for participation in the Asphalt Supplier Certification (ASC) program for supplying PG binders to Department projects.
- 1.2 The values stated in either English or acceptable SI metric units are to be regarded separately as standard, as appropriate for a specification with which this ITM is used. Within the text, Metric units are shown in parenthesis. The values stated in each system may not be exact equivalents; therefore each system shall be used independently of the other, without combining values in any way.
- 1.3 This ITM may involve hazardous materials, operations or equipment. This ITM does not purport to address all of the safety problems associated with the ITMs use. The ITM user's responsibility is to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

#### 2.0 REFERENCES.

#### 2.1 AASHTO Standards.

MP 1 Specification for Performance Graded Asphalt Binder.
PP 26 Standard Practice for an Approved Supplier Certification System for Suppliers

of Performance Graded Asphalt Binders.

### 3.0 TERMINOLOGY.

- **3.1 Terms and Abbreviations.** Definitions for terms and abbreviations shall be in accordance with the Departments Standard Specifications, Section 101, except as follows.
- **PG Binder.** An asphalt-based cement that is produced from petroleum residue, either with or without the addition of non-particulate organic modifiers, meeting the requirements of AASHTO MP 1 for use in HMA mixture.
- **3.3 Supplier.** A supplier is one who produces the final product or who makes the blend or modification that alters the properties of the PG binder. A supplier shall be a refinery, a terminal or an HMA producer.
- **3.4 Manufacture.** The process in which the PG binder properties are achieved. In-line blending of unmodified PG binders or storage of PG binders is not regarded as a manufacturing process.
- **3.5 Quality Control Plans (QCP).** The ASC program permits the manufacture and shipment of PG binders within the framework of a QCP, as outlined in AASHTO PP 26, without complete pretesting of the PG binder by the Department or the supplier.

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**4.0 SIGNIFICANCE AND USE.** This ITM is used to supplement the requirements of AASHTO PP26 to guide PG binder suppliers in the preparation of their QCP for the manufacture, storage, shipping and handling of their PG binders under the ASC Program.

- **ASC PROGRAM REQUIREMENTS.** In order to be included in the ASC program, the supplier shall adhere to the following:
  - 5.1 The supplier shall submit a written request to the Chief, Materials and Tests Division, to supply specific PG binders under the ASC program.
  - 5.2 The supplier shall conduct PG binder testing in a laboratory that has been approved by the Department. Participation in the AMRL equipment inspection and proficiency sample programs with satisfactory ratings will be the basis for approval.
  - 5.3 The supplier shall submit to the Department a consolidated QCP covering each of their facilities that manufactures or stores PG binder. The QCP shall cover each PG binder to be supplied under the ASC program. Typical testing and inspection procedures shall be included for each PG binder. The minimum requirements stated in section 9 of AASHTO PP 26 will be required.
  - 5.4 The QCP shall state whether or not an air blowing process is used in the manufacture of the PG binder. If air blowing is used, then the relative amount of air blowing shall be stated as either light, medium or heavy. Light, medium or heavy shall be defined as follows:

Light: 1 - 2 /C increase in original DSR Medium: 3 - 4 /C increase in original DSR Heavy: > 4 /C increase in original DSR

Heavy air blowing will not be allowed in the PG binder manufacturing process.

5.5 Specification compliance testing, complete AASHTO MP 1 testing, shall be done at the frequency outlined in the QCP per PG binder and at least once following feed stock changes. After initial testing, the minimum frequency for specification compliance testing shall be once per month.

If the supplier's tests show that the PG binder was out of specification, the supplier shall cease shipment, immediately notify the Department and take action to bring material back into specification. When material is back in specification and is ready for shipment, the supplier shall notify the Department.

A supplier will be considered fully approved for the Department ASC program when three of the PG binders allowed by specifications have been qualified. PG 58-28 and PG 64-22 may be sampled at the supplier's facility by Department personnel provided that the supplier's facility is not located more than 60 miles outside the Indiana State line.

A PG binder will be qualified after three consecutive production batches are tested by the Department and full compliance with a complete series of AASHTO MP1 tests has been indicated for all samples. All qualification samples will be witnessed by the Engineer. The Contractor and the Engineer will sign the sampling form attesting to the fact that the sample was taken properly and is representative of the PG binder material.

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- PG binder testing conducted by other State DOT laboratories will be considered for use in ASC approval, provided that a similar sampling and testing program was used.
- **5.7** A fully approved ASC supplier will be allowed to supply any PG binder for which the Department has an approved QCP.
- **5.8** A limited approved ASC supplier will be allowed to supply only the PG binders that have been qualified in accordance with 5.1.6.
- **5.9** Full or limited ASC approval shall be supplier specific and shall not be transferable.
- **5.10** The supplier shall submit a monthly summary report of all QC tests and inspections for each PG binder supplied under the ASC program.
- **5.11** Representatives of the Department shall be allowed to visit the supplier's location for the purpose of conducting an audit to ensure compliance with the QCP.
- **5.12** The supplier shall maintain detailed records of QC inspections, test results and shipments for at least three years.
- 5.13 Approval to supply under the ASC program shall remain in effect until otherwise notified by the Department in writing. Continued approval by the Department for a supplier to supply under the ASC program shall be contingent upon a record of satisfactory performance.
- **5.14** Unsatisfactory performance shall be defined as three consecutive production batches delivered out of specification to a Department project.
- **5.15** A supplier that has been removed from the ASC program for unsatisfactory performance will not be considered for ASC approval for a period of three months after the written notification.
- 5.16 The supplier shall furnish with the shipping report for each load, a statement certifying that the PG binder has been manufactured according to the ASC program.
- **5.17** The supplier shall furnish instructions with each PG binder on proper storage and handling of the material.